

**AMENDMENTS TO THE CLAIMS:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**LISTING OF CLAIMS:**

1. (Canceled)
2. (Previously Presented) The method in accordance with Claim 40, comprising:  
  
applying a torque density (torque per screw/axis distance<sup>3</sup>) of at least 7 Nm/cm<sup>3</sup> to each screw of the extruder.
3. (Previously Presented) The method in accordance with Claim 40, comprising:  
  
applying a torque density (torque per screw/axis distance<sup>3</sup>) of at least 9 Nm/cm<sup>3</sup> to each screw of the extruder.
4. (Currently Amended) The method in accordance with Claim 40, wherein  $D_a/D_i$  is from 1.5 to 1.63 for the twin flighted screw elements.
5. (Currently Amended) The method in accordance with Claim 40, wherein the ratio for the twin flighted screw elements is  $1500 < Am^3/Vf^2 < 2030$ .

6. (Currently Amended) The method in accordance with Claim 40, wherein the product ~~[[to be]]~~ processed during processing is chosen from the group consisting of contaminated polycondensates, moist polycondensates, and mixtures thereof ~~is a polycondensate that is at least one of contaminated and moist.~~

7. (Original) The method in accordance with Claim 6, wherein the polycondensate to be processed is polyester.

8. (Original) The method in accordance with Claim 7, wherein the polycondensate to be processed is a polyester PET bottle recyclate.

9. - 14. (Canceled)

15. (Currently Amended) The method in accordance with Claim ~~[[40]]~~ 41, wherein the elastomer is a powdery or granulated elastomer in which at least one filling agent has already been incorporated.

16. (Previously Presented) The method in accordance with Claim 40, wherein the screws are tightly intermeshing.

17. (Canceled)

18. (Currently Amended) The method in accordance with Claim 40, comprising:  
controlling the temperature of a core and a housing of the extruder, wherein the core and housing are both stationary.

19. (Previously Presented) The method in accordance with Claim 18, comprising controlling the temperature of the core and the housing separately.

20. (Original) The method in accordance with Claim 18, wherein the housing is divided into segments whose temperature is controlled separately.

21. (Previously Presented) The method in accordance with Claim 40, wherein the screws are arranged in a ring.

22. (Currently Amended) The method in accordance with Claim 6, comprising ~~during processing~~ in the course of processing supplying the polycondensate, ~~in a molten state~~ melting and later ~~hardening~~ solidifying the polycondensate, wherein a total period during which a temperature of the polycondensate is above a melting temperature of the polycondensate during processing is less than approximately 60 seconds.

23. (Previously Presented) The method in accordance with Claim 22, wherein the total period during which the temperature of the polycondensate is above the melting temperature of the polycondensate during processing is less than approximately 30 seconds.

24. (Original) The method in accordance with Claim 22, wherein a content of residual water in the melt exceeds 200 ppm.

25. (Previously Presented) The method in accordance with Claim 22, wherein, in an initial form, the polycondensate is a bulk material with a bulk density in a range from 200 kg/m<sup>3</sup> to 600 kg/m<sup>3</sup>.

26. (Original) The method in accordance with Claim 22, wherein the polycondensate is present as chips or chippings.

27. (Previously Presented) The method in accordance with Claim 22, comprising partially pre-drying the polycondensate material prior to application in a molten state.

28. (Previously Presented) The method in accordance with Claim 22, comprising:

a degassing step during which volatile contaminations and/or decomposition products are removed from the polycondensate melt.

29. (Currently Amended) The method in accordance with Claim 22, wherein the polycondensate is placed in the extruder in a solid state, the polycondensate is heated to a temperature below a melting point, and the polycondensate is degassed ~~and/or~~ or dried at a pressure below atmospheric pressure ~~and/or~~ or while adding an inert gas.

30. (Original) The method in accordance with Claim 29, wherein a total time during which the polycondensate is in the molten state during the process comprises a first period during which the polycondensate remains in the extruder after application in the molten state and a second period during which the polycondensate, which is still in the molten state, is processed outside of the extruder.

31. (Previously Presented) The method in accordance with Claim 30, wherein a duration of the first period is less than approximately 15 seconds.

32. (Previously Presented) The method in accordance with Claim 30, wherein a duration of the first period is less than approximately 10 seconds.

33. (Original) The method in accordance with Claim 29, wherein processing of the molten polycondensate outside of the extruder includes filtering of the melt.

34. (Previously Presented) The method in accordance with Claim 30, comprising using a melt pump to process the molten polycondensate outside of the extruder.

35. (Previously Presented) The method in accordance with Claim 22, wherein upon hardening, the polycondensate is further processed to form a granulate made up of pellets.

36. - 39. (Canceled)

40. (Currently Amended) A method for preparation of a product comprising:

supplying the product to a multi-shaft extruder including twin flighted screw elements;

rotating at least four individually driven, self-cleaning screws of the multi-shaft extruder in a common direction about their own axes, each screw being arranged in a respective hole, and each screw having a smooth surface, an outer diameter  $D_a$  at a screw thread, and an inner diameter  $D_i$  at a screw base; and

forming a process space having a lateral area  $A_m$  formed by a smooth hole surface and a free volume  $V_f$  formed between each screw and the hole surface;

wherein at least one part of the process space formed by the lateral area  $A_m$  and the free volume  $V_f$  has a ratio  $A_m^3/V_f^2$  between 1020 and 3050 for said twin flighted screw elements [[when]] at a  $D_a/D_i$  [[is]] ratio of 1.3 to a  $D_a/D_i$  ratio of 1.7.

41. (Currently Amended) The method in accordance with claim 40 wherein the product ~~to be processed~~ supplied to the extruder is an elastomer.

42. (Previously Presented) The method in accordance with claim 40 wherein all of the screws are rotated in a common direction.